Central bank credibility and the expectations channel: Evidence based on a new credibility index

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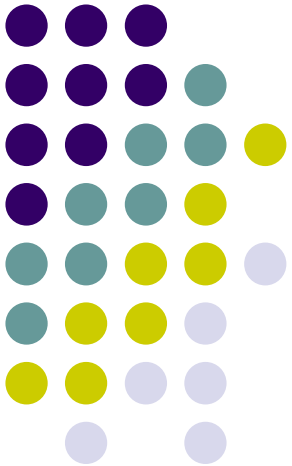


4th Research Conference "Addressing Structural Rigidities in View of Monetary Policy Transmission Effectiveness", National Bank of the Republic of Macedonia

April 23, 2015

Introduction & motivation

- Over the last two decades, the **question of central bank credibility** has become a central concern of the academic literature on monetary policy

- It has also become a **major concern for many central bankers** around the world, which have taken a number of measures to enhance the credibility of their monetary policy

- This process of building central bank credibility was especially strong in inflation targeting countries, both industrialized and emerging, with major improvements in central bank **communication and transparency**

Introduction & motivation

- **What is credibility?** *"In a word, credibility matters in the theory and it is certainly believed to matter in practice – although empirical evidence on this point is hard to come by because credibility is not easy to measure"* (Blinder, 2000)

- The survey conducted by Blinder (2000) suggests in particular that the definition of credibility of the central bankers differs somewhat from that of the academic economists

- A central bank is said credible if its announcements are believed by people ⇒ a monetary authority is said to be credible if *"people believe it will do what it says"* (Blinder, 2000), i.e. if **deeds are expected match words**

Introduction & motivation

- In an inflation targeting framework, credibility means therefore that people believe that the central bank has the **willingness**, but also the **ability**, to reach the inflation target that it announced *ex ante*

- In particular, this means that private sector **inflation expectations are anchored on the target** and that people do not over-react to target misses

- Nonetheless, despite the growing interest of policy-makers and academics for this concept, **no clear consensus** emerged about what central bank credibility really means, how it can be established, and especially how it can be measured

Introduction & motivation

- Moreover, central bank credibility measures developed in the literature have **several limitations** and are not able to show the "true" credibility level of inflation-targeting central banks

- **Objectives of the paper**:

1) Propose a new time-varying measure of central bank credibility that addresses the main limitation of previous indexes
2) Analyze whether the credibility of monetary policy has evolved in emerging inflation-targeting economies
3) Empirically test whether credibility implies less short-term interest rate volatility, through the expectations channel

Presentation Outline

1) Existing measures of Central bank credibility (CBC)
2) A new measure of CBC
3) Application to emerging IT countries
4) Impact of CBC on the volatility of monetary policy instrument
5) Robustness checks
6) Conclusion and policy implications

Existing measures

- Two types of credibility measures developed in the literature

- The 1st refers to **Bomfim and Rudebusch** (2000) approach: consists of assessing the weight attached by the private sector to the announced inflation target in the formation of their inflation expectations:

$$\pi^{e}_{t|T} = \lambda\bar{\pi}_t + (1-\lambda)\tilde{\pi}_{t-q}$$

- $\lambda\ (0 \leq \lambda \leq 1)$ measures the degree to which expectations are anchored on the target. The higher λ, the higher the weight attached by the economic agents to the target in forming their expectations, the higher the central bank's credibility.

Existing measures

- The 2nd type of measures refers to the **gap between inflation expectations and the inflation target**

  ⇒ any deviations of expectations from the target is viewed as a **loss of central bank credibility**

- Two main indexes in the literature: Cecchetti and Krause (2002) and de Mendonça and de Guimarães e Souza (2009)

- **Cecchetti and Krause** (2002) index:

$$CRED_{CK} = \begin{cases} 1 & \text{if} \quad \pi^e \leq \bar{\pi}_t \\ 1 - \dfrac{1}{20\% - \bar{\pi}_t}\left[\pi^e - \bar{\pi}_t\right] & \text{if} \quad \bar{\pi}_t < \pi^e < 20\% \\ 0 & \text{if} \quad \pi^e \geqslant 20\% \end{cases}$$

⇒ 0 (**no credibility**) and 1 (**full credibility**)

Existing measures

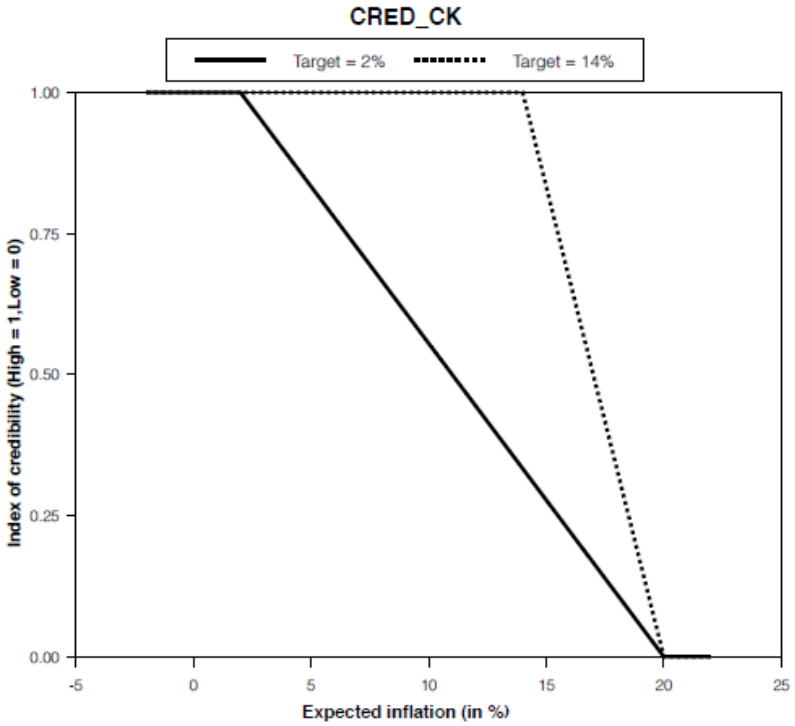
- **De Mendoça and de Guimarães e Souza** (2009) index considers a target range:

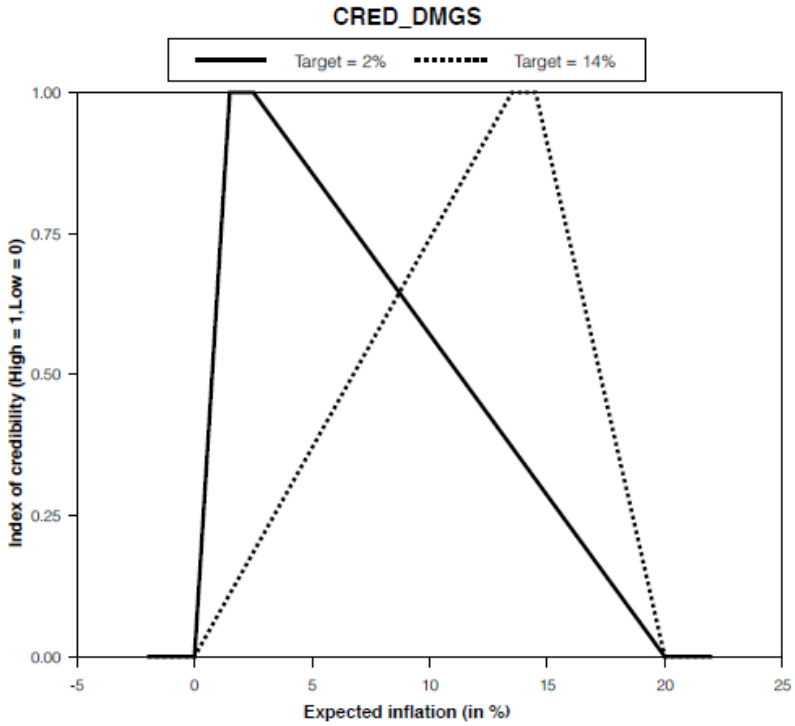
$$CRED_{DMGS} = \begin{cases} 1 & \text{if } \bar{\pi}^{min} \leqslant \pi^e \leqslant \bar{\pi}^{max} \\ 1 - \dfrac{1}{20\% - \bar{\pi}_t^{max}} \left[\pi^e - \bar{\pi}_t^{max}\right] & \text{if } \bar{\pi}_t{}^{max} < \pi^e < 20\% \\ 1 - \dfrac{1}{-\bar{\pi}_t^{min}} \left[\pi^e - \bar{\pi}_t^{min}\right] & \text{if } 0 < \pi^e < \bar{\pi}_t{}^{min} \\ 0 & \text{if } \pi^e \geqslant 20\% \text{ or } \pi^e \leqslant 0 \end{cases}$$

- A central bank is viewed as **non-credible** $(Cred_{DMGS} = 0)$ if expected annual inflation is equal or greater than 20% or lower or equal to 0%, and as **fully credible** $(Cred_{DMGS} = 1)$ if inflation expectations are anchored within the target range. Between these two limits, the value of the index drecreases linearly.

Existing measures

- **Numerical example** ⇒ **two cases**: a single-digit inflation target equal to 2% (with +/- 0.5 % point tolerance intervals), and a double-digit inflation target equal to 14% (with +/- 0.5 % point tolerance intervals)





Existing measures

- The profile of these 2 indexes and the **marginal loss of credibility** largely **depends on the level of inflation target considered**

- A positive deviation of inflation expectations from the target will be strongly punished in terms of credibility loss if the target is closed to the upper limit of 20%

- For example, for a positive deviation of 3% points from the target range, the value of $Cred_{DMGS}$ is equal to 0,45 in the case of a target equal to 14%, and to 0,83 in the case of a target equal to 2%

⇒ Such indexes are **not adequate for assessing the current level of credibility** of emerging IT central banks, since most of them now target relatively low inflation rates.

A new measure of credibility

- We propose a new index of central bank credibility **not based on *ad hoc* upper and/or lower thresholds**

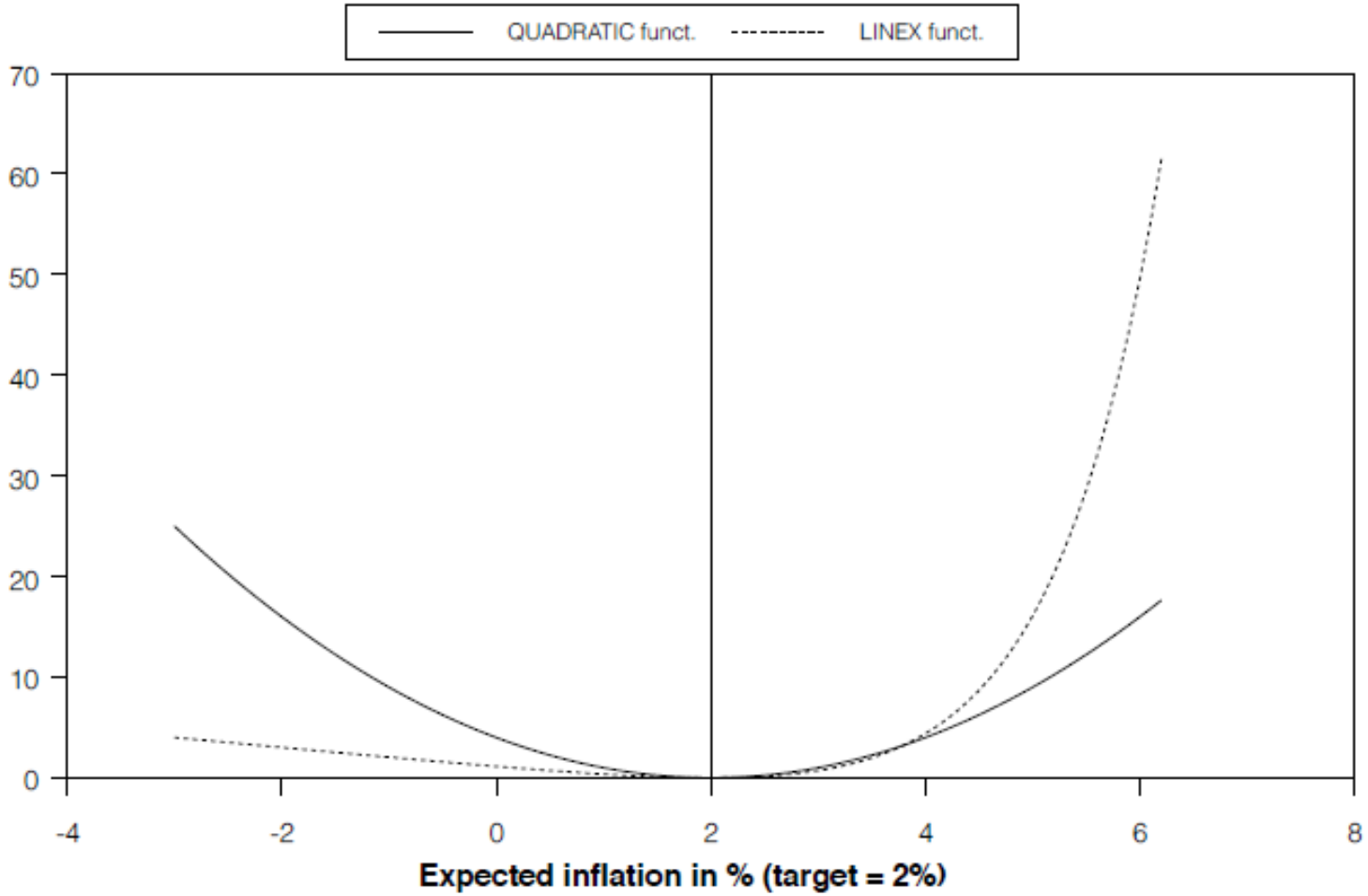
- Index based on an inverse asymmetrical **LINEX function** (partly LINear, partly Exponential) [Varian, 1974; Zellner, 1986): negative deviations are considered less serious than positive deviations :

$$f(\tilde{\pi}^e) = exp\left(\phi\left(\tilde{\pi}^e\right)\right) - \phi\left(\tilde{\pi}^e\right) - 1$$

with $\tilde{\pi}^e$ the deviation between expected inflation and the target

- For $\phi = 1,\ \tilde{\pi}^e > 0$ will be considered as more penalizing than $\tilde{\pi}^e < 0$

A new measure of credibility



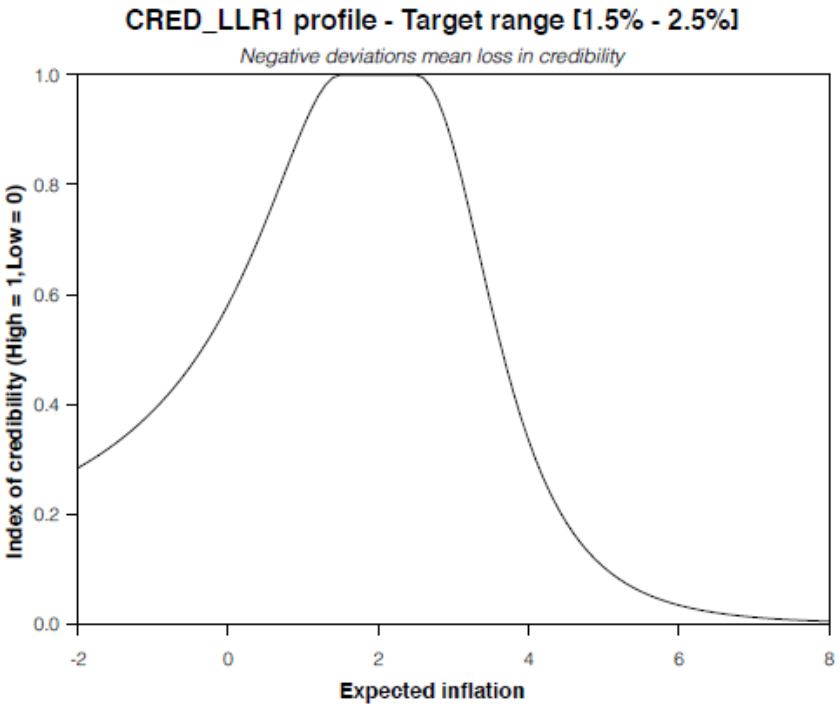
A new measure of credibility

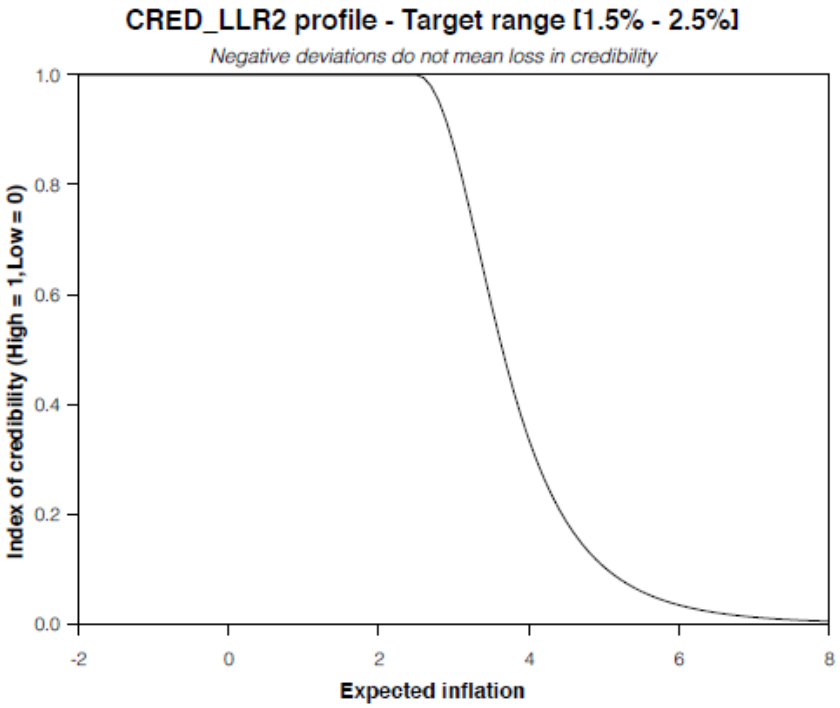
- We distinguish **two cases**: one considering that $\pi^e < \bar{\pi}$ represents a loss of credibility (***Cred_LLR1***) and one considering $\pi^e < \bar{\pi}$ that does not mean loss of credibility (***Cred_LLR2***):

$$CRED_{LRR1} = \begin{cases} \dfrac{1}{exp(\pi^e - \bar{\pi}^{min}) - (\pi^e - \bar{\pi}^{min})} & \text{for} \quad \pi^e < \bar{\pi}^{min} \\ 1 & \text{for} \quad \pi^e \in [\bar{\pi}^{min}, \bar{\pi}^{max}] \\ \dfrac{1}{exp(\pi^e - \bar{\pi}^{max}) - (\pi^e - \bar{\pi}^{max})} & \text{for} \quad \pi^e > \bar{\pi}^{max} \end{cases}$$

$$CRED_{LRR2} = \begin{cases} 1 & \text{for} \quad \pi^e \leqslant \bar{\pi}^{max} \\ \dfrac{1}{exp(\pi^e - \bar{\pi}^{max}) - (\pi^e - \bar{\pi}^{max})} & \end{cases}$$

A new measure of credibility





Application to emerging IT countries

- **Data and period**: $Cred_{LLR1}$ and $Cred_{LLR2}$ computed on a monthly basis on the period between the effective IT adoption date (if data available) and December 2013

- **Private sector inflation expectations**: forecast survey provided by **Consensus Economics** → surveyed forecasters located in their respective country and work in the financial sector

- The **12-month ahead expected inflation** constructed by taking the weighted arithmetic average of the mean forecast for the current year and the next year:

$$\pi^{e}_{t,12m} = \frac{(12-t)\pi_t^{e^{current}} + t\,\pi_t^{e^{next}}}{12}$$

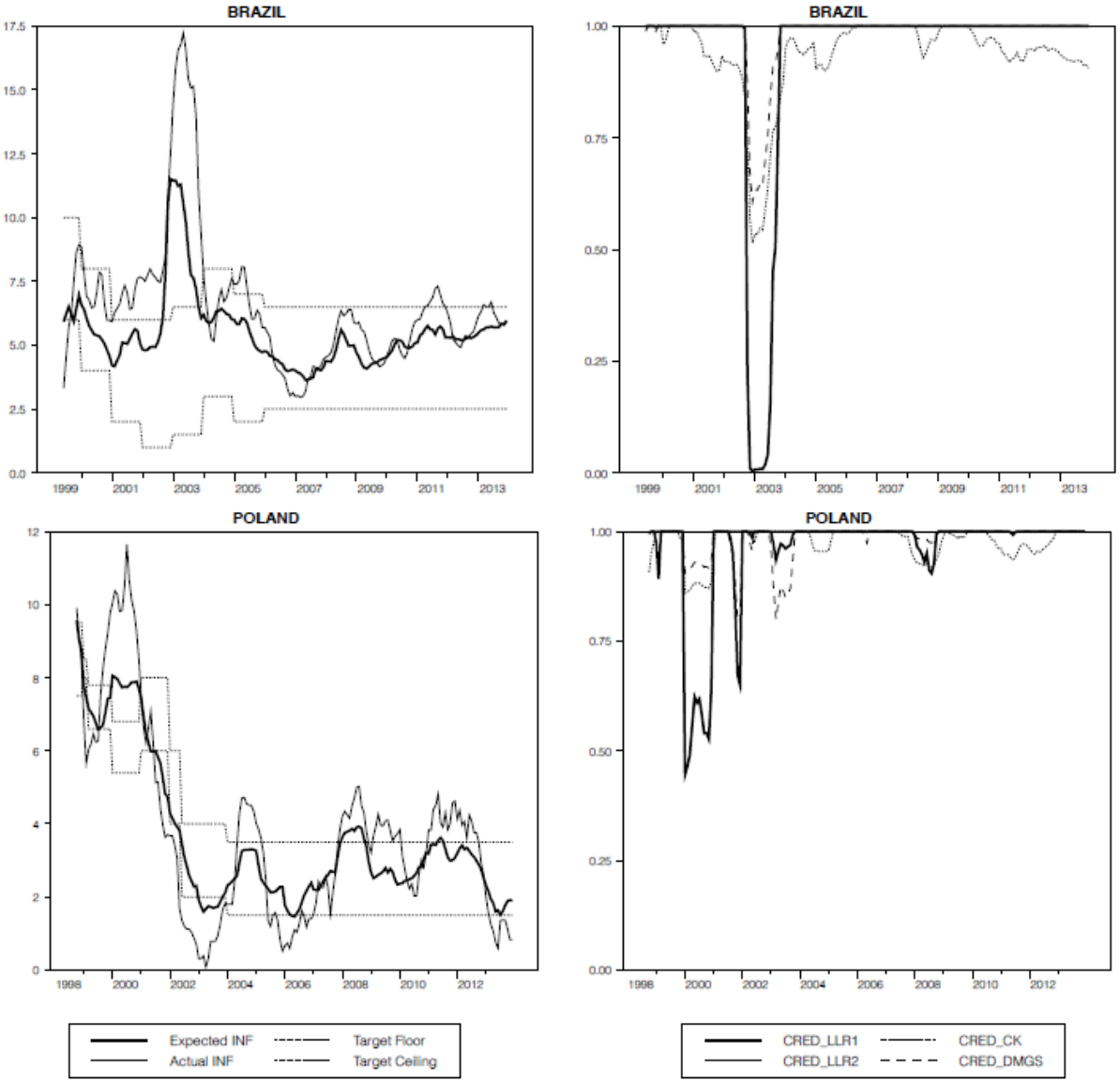
with t the month (with $1\,(= January) \leq t \leq 12 (= December)$)

Application to emerging IT countries

Country	Effective IT start	Target measure =Headline Inflation?	Target horizon	Consensus Economics data First obs.	Consensus Economics data Monthly since	Nb. of obs. (in months)
Brazil	1999M6	Yes	Yearly target	1990M2	2001M4	175
Chile	1999M9	Yes	Around two years	1993M3	2001M4	172
Colombia	1999M9	Yes	Medium term	1993M3	2001M4	172
the Czech Rep.	1998M1	Since 01/2002	12-18 months	1995M1	2007M5	192
Guatemala	2005M1	Yes	end of year	2009M1	2009M1	60
Hungary	2001M6	Yes	Medium term	1990M11	2007M5	151
Indonesia	2005M7	Yes	Medium term	1990M11	1990M11	102
Israel	1997M6	Yes	Within two years	1995M1	1995M1	199
Mexico	2001M1	Yes	Medium term	1990M2	2001M4	156
Peru	2002M1	Yes	At all times	1993M3	2001M4	144
the Philippines	2002M1	Yes	Medium term	1994M12	1994M12	144
Poland	1998M10	Yes	Medium term	1990M11	2007M5	183
Romania	2005M8	Yes	Medium term	1995M1	2007M5	101
Slovakia	2005M1	Yes*	$\star$	1995M1	2007M5	48
South Africa	2000M2	Since 01/2009	On a continuous basis	1993M6	1993M6	167
South Korea	2001M1	Since 01/2007	Three years	1990M1	1990M1	156
Thailand	2000M5	Core inflation	Eight quarters	1990M11	1990M11	164
Turkey	2006M1	Yes	Three years	1995M1	2007M5	96

* joined the Eurozone in January 2009.
Source: Roger (2009), Hammond (2012, Table A p.9) and Central Banks' website.

Application to emerging IT countries



Application to emerging IT countries

	First 12 months	First 24 months	Mean (07M6-08M12)	Mean (IT start - 09M12)	Mean (overall period)	St. Dev (overall period)	Prob[LLR1 > 0.95] (overall period)	Prob[LLR1 < 0.5] (overall period)	Rank (overall period)
Brazil	1.00	1.00	1.00	0.91	0.94	0.05	0.87	0.06	10
Chile	1.00	1.00	0.83	0.97	0.98	0.01	0.91	0.01	3
Colombia	0.76	0.88	0.90	0.96	0.98	0.01	0.88	0.00	5
Czech Rep.	0.21	0.59	0.78	0.88	0.92	0.04	0.71	0.05	12
Guatemala	-	-	-	-	0.98	0.00	0.82	0.00	2
Hungary	1.00	0.99	0.25	0.66	0.64	0.09	0.19	0.32	18
Indonesia	0.41	0.69	0.55	0.68	0.80	0.09	0.52	0.17	14
Israel	1.00	0.87	1.00	0.97	0.97	0.01	0.87	0.00	6
Mexico	0.91	0.96	0.97	0.98	0.98	0.00	0.85	0.00	4
Peru	1.00	1.00	0.76	0.95	0.97	0.01	0.88	0.03	7
Philippines	0.92	0.89	0.69	0.75	0.83	0.06	0.50	0.16	13
Poland	0.99	0.82	0.97	0.95	0.96	0.01	0.81	0.00	8
Romania	0.75	0.87	0.60	0.76	0.77	0.05	0.32	0.13	15
Slovakia	0.99	0.87	0.47	0.71	0.71	0.06	0.15	0.19	17
South Africa	1.00	1.00	0.66	0.90	0.93	0.03	0.73	0.04	11
South Korea	1.00	1.00	0.97	0.99	0.99	0.00	0.93	0.00	1
Thailand	1.00	1.00	0.81	0.95	0.95	0.01	0.68	0.02	9
Turkey	0.66	0.56	0.38	0.59	0.72	0.10	0.46	0.27	16
Mean	0.86	0.88	0.74	0.86	0.89	0.03	0.67	0.08	
Median	0.99	0.89	0.78	0.91	0.94	0.02	0.77	0.04	

The Cred_LLR1 Index in emerging inflation-targeting countries

Credibility and interest rate volatility

- To check the ability of our index to “correctly” measure central bank credibility, we investigate to what extend credibility influences the **volatility of short-term interest rate** in emerging inflation-targeting countries

- The following hypothesis is tested: **a higher (lower) credibility contributes to lower (higher) volatility for the change in interest rate**

⇒ **Expectations channel**

Credibility and interest rate volatility

- We use an **Exponential GARCH model** (Nelson, 1991). The **mean equation**, augmented with the inflation rate, is:

$$i_t = c + \rho_1 i_{t-1} + \rho_2 i_{t-2} + \phi \pi_t + \varepsilon_t$$

- The **variance equation** is augmented with our central bank credibility index:

$$log\,(h_t) = \alpha_0 + \sum_{i=1}^{q} \alpha_i g(z_{t-i}) + \sum_{i=1}^{p} \beta_i log(h_{t-i}) + \omega CRED\_LLR1_{t-1}$$

with $g\,(z_{t-i}) = \theta z_{t-i} + \gamma\,(|z_{t-i}| - E|z_{t-i}|)$, where $E|z_{t-i}|$ is conditional to a given density function

Credibility and interest rate volatility

Country	Kurtosis excess on interest rate data series (a)	No serial correlation test on residuals ε_t (b)	No ARCH Effect test on residuals ε_t (c)		
			lags = 2	lags = 4	lags = 6
Brazil	-0.52	0.764	0.022	0.023	0.056
Chile	0.42	0.591	0.000	0.000	0.000
Colombia	0.88*	0.035	0.000	0.017	0.000
Czech Rep.	5.51*	0.918	0.000	0.000	0.000
Hungary	-0.34	0.168	0.951	0.982	0.000
Indonesia	-0.47	0.708	0.000	0.000	0.000
Israel	-0.56	0.846	0.137	0.403	0.096
Mexico	4.32*	0.605	0.006	0.000	0.000
Peru	-0.05	0.001	0.001	0.008	0.035
Philippines	-0.89	0.547	0.056	0.001	0.004
Poland	0.13	0.563	0.000	0.000	0.000
Romania	0.33	0.938	0.025	0.039	0.127
Slovakia	-0.96	0.101	0.233	0.248	0.398
South Africa	-0.95	0.672	0.111	0.002	0.014
South Korea	-1.01	0.965	0.005	0.005	0.021
Thailand	-0.32	0.100	0.115	0.256	0.052
Turkey	-1.60	0.176	0.305	0.596	0.912

(a) * means rejection of the Normality hypothesis at the 5% level (leptokurtic distribution).

(b) P-value of the West & Cho (1995) test on the residuals ε_t of the mean equation.

(c) P-value of the ARCH test consisting in regressing the square residuals series on its own lags. Under the null, the corresponding R^2 is equal to zero.

Table 5: Properties of the interest rate data series and tests on the mean equation residuals

Credibility and interest rate volatility

	Brazil	Chile	Colombia	Czech Rep.	Indonesia	Mexico
MEAN EQUATION						
constant	0.063	0.107***	0.017***	-0.022*	0.324***	-0.007
	(0.067)	(0.025)	(0.006)	(0.012)	(0.012)	(0.031)
i_{t-1}	1.802***	1.559***	1.414***	1.267***	0.896***	1.309***
	(0.016)	(0.067)	(0.001)	(0.064)	(0.019)	(0.078)
i_{t-2}	-0.815***	-0.589***	-0.427***	-0.286***	-0.069***	-0.313***
	(0.018)	(0.005)	(0.001)	(0.062)	(0.017)	(0.078)
π_t	0.019**	0.017***	0.009***	0.028***	0.097***	0.006
	(0.009)	(0.005)	(0.001)	(0.006)	(0.003)	(0.008)
VARIANCE EQUATION						
constant	-0.632**	0.354	0.770***	0.028	-2.304***	-0.982*
	(0.278)	(0.396)	(0.001)	(0.432)	(0.264)	(0.524)
$g(z_{t-1})$	0.497***	0.661***	-0.291***	2.061	2.287***	0.503**
	(0.114)	(0.104)	(0.001)	(1.394)	(0.203)	(0.239)
h_{t-1}	0.643***	0.949***	0.942***	0.897***	0.865***	1.011***
	(0.013)	(0.015)	(0.001)	(0.039)	(0.050)	(0.009)
$CRED\_LLR1_{t-1}$	-0.729***	-1.043***	-0.788***	-0.564*	0.262	0.607
	(0.260)	(0.385)	(0.001)	(0.313)	(0.375)	(0.525)
Degrees of freedom (a)	-	-	2.92	2.04	-	2.42
GARCH LB test (b)	0.078	0.586	0.035	0.213	0.526	0.999
GARCH McLL test (c)	0.994	0.774	0.750	0.643	0.318	0.999
Number of observations	173	167	170	163	100	132

Notes: Std. errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.
(a) Estimation of the number of degrees of freedom v (in case of Student-t distribution).
(b) P-Value of the Ljung-Box no serial correlation test on the standardized residuals $\varepsilon_t/\sqrt{(h_t)}$.
(c) P-Value of the McLeod-Li no serial correlation test on the squared standardized residuals ε_t^2/h_t.

Table 3: EGARCH-X estimates (1/2)

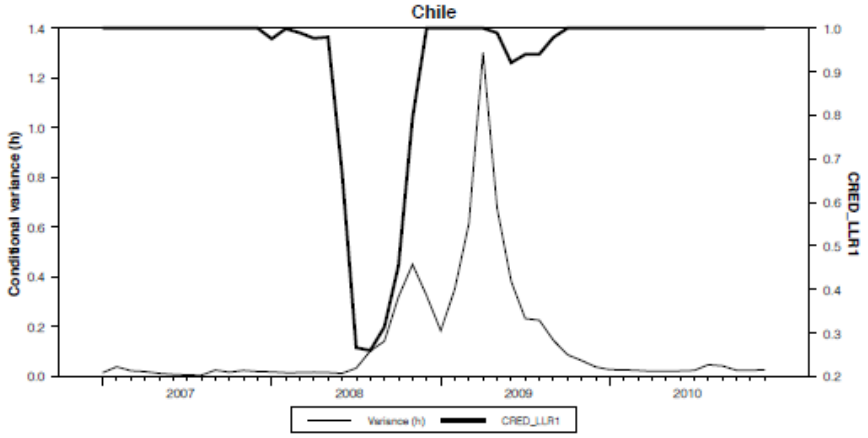
Credibility and interest rate volatility

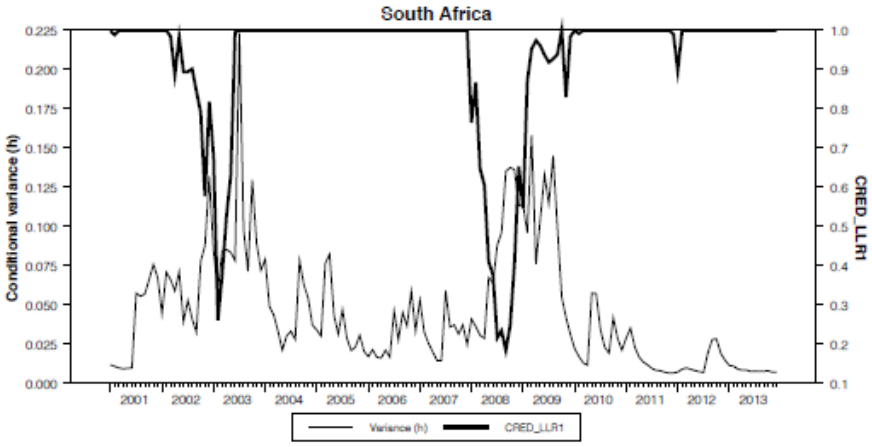
	Peru	Philippines	Poland	Romania	South Africa	South Korea
MEAN EQUATION						
constant	0.286***	-0.044	-0.069	0.077	0.014***	0.032
	(0.003)	(0.030)	(0.059)	(0.148)	(0.001)	(0.028)
i_{t-1}	1.727***	1.305***	0.845***	1.326***	1.573***	1.542***
	(0.001)	(0.001)	(0.009)	(0.072)	(0.001)	(0.004)
i_{t-2}	-0.783***	-0.303***	0.116***	-0.345***	-0.584***	-0.549***
	(0.001)	(0.002)	(0.015)	(0.081)	(0.001)	(0.010)
π_t	-0.019***	0.004	0.077***	0.017	0.013***	-0.001
	(0.001)	(0.007)	(0.007)	(0.019)	(0.001)	(0.006)
VARIANCE EQUATION						
constant	-2.253***	-0.242	-0.097*	-0.255	-0.274	7.659***
	(0.077)	(0.173)	(0.051)	(0.381)	(0.285)	(1.752)
$g(z_{t-1})$	1.517***	0.373***	0.328***	1.062***	0.546***	-0.003
	(0.074)	(0.101)	(0.106)	(0.213)	(0.109)	(0.097)
h_{t-1}	0.538***	0.866***	0.959***	0.567***	0.767***	0.735***
	(0.019)	(0.051)	(0.016)	(0.123)	(0.080)	(0.063)
$CRED1\_LLR_{t-1}$	-0.508***	-0.617***	-0.262***	-1.142**	-0.985***	-9.032***
	(0.078)	(0.202)	(0.049)	(0.573)	(0.302)	(1.997)
Degrees of freedom (a)	-	-	-	-	-	-
GARCH LB test (b)	0.227	0.501	0.119	0.783	0.491	0.688
GARCH McLL test (c)	0.996	0.321	0.682	0.982	0.184	0.557
Number of observations	131	142	181	99	165	154

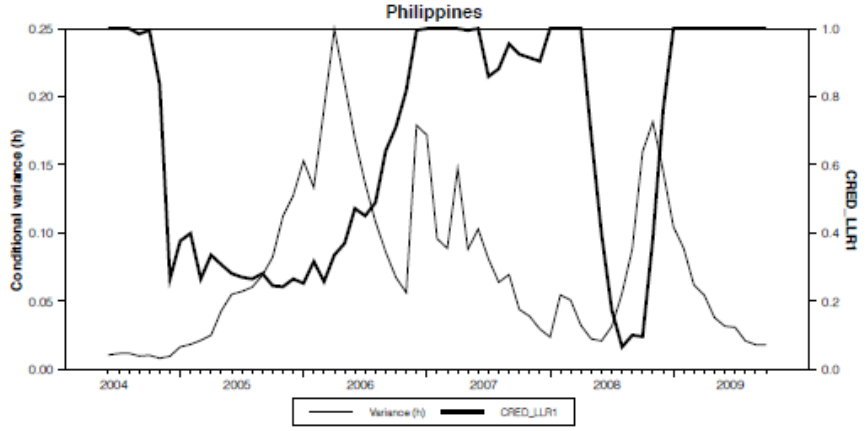
Notes: Std. errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.
(a) Estimation of the number of degrees of freedom v (in case of Student-t distribution).
(b) P-Value of the Ljung-Box no serial correlation test on the standardized residuals $\varepsilon_t/\sqrt{(h_t)}$.
(c) P-Value of the McLeod-Li no serial correlation test on the squared standardized residuals ε_t^2/h_t.

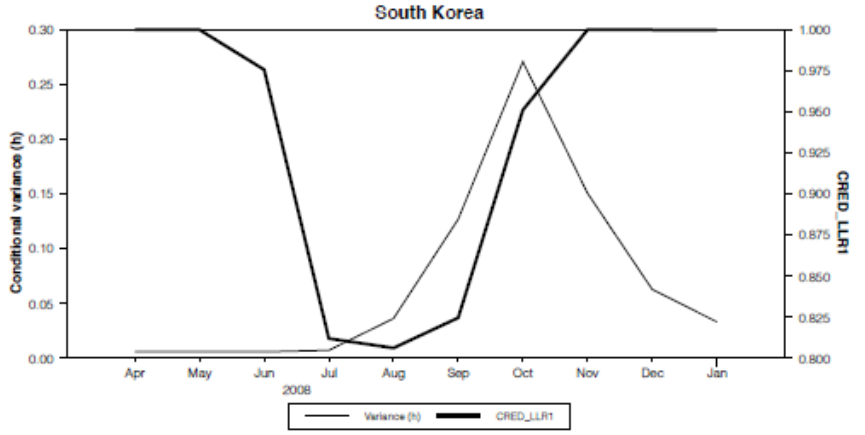
Table 4: EGARCH-X estimates (2/2)

Credibility and interest rate volatility









Robustness checks

	Brazil	Chile	Colombia	Czech Rep.	Indonesia	Mexico
MEAN EQUATION						
constant	0.040*	-0.054***	0.003	-0.020	0.272**	-0.010
	(0.021)	(0.005)	(0.029)	(0.014)	(0.111)	(0.029)
i_{t-1}	1.812***	1.558***	1.512***	1.274***	1.138***	1.307***
	(0.001)	(0.001)	(0.059)	(0.073)	(0.020)	(0.004)
i_{t-2}	-0.821***	-0.557***	-0.520***	-0.293***	-0.227***	-0.311***
	(0.001)	(0.002)	(0.061)	(0.071)	(0.023)	(0.001)
π_t	0.005	0.018***	0.010	0.027***	0.027	0.006
	(0.004)	(0.003)	(0.011)	(0.007)	(0.023)	(0.006)
VARIANCE EQUATION						
constant	-0.699***	0.559***	1.499***	-0.239	-1.026***	-1.337**
	(0.100)	(0.017)	(0.126)	(0.367)	(0.331)	(0.598)
$g(z_{t-1})$	0.837***	0.602***	1.195***	0.635**	1.036***	1.130
	(0.149)	(0.032)	(0.136)	(0.264)	(0.383)	(0.862)
h_{t-1}	0.156***	0.943***	0.964***	0.863***	0.951***	0.998***
	(0.036)	(0.004)	(0.021)	(0.054)	(0.063)	(0.013)
$CRED\_LLR1\_MA(6)$	-2.378***	-1.207***	-1.604***	-0.729*	0.129	0.976
	(0.093)	(0.017)	(0.140)	(0.451)	(0.202)	(0.622)
Degrees of freedom (a)	-	-	2.01	2.88	-	2.09
GARCH LB test (b)	0.060	0.240	0.004	0.645	0.986	0.556
GARCH McLL test (c)	0.805	0.742	0.980	0.628	0.984	0.154
Number of observations	170	167	167	160	97	130

Notes: Std. errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.
(a) Estimation of the number of degrees of freedom v (in case of Student-t distribution).
(b) P-Value of the Ljung-Box no serial correlation test on the standardized residuals $\varepsilon_t/\sqrt{(h_t)}$.
(c) P-Value of the McLeod-Li no serial correlation test on the squared standardized residuals ε_t^2/h_t.

Table 6: EGARCH-X estimates with the 6-month moving average of $CRED_{LLR1}$ (1/2)

Robustness checks

	Peru	Philippines	Poland	Romania	South Africa	South Korea
MEAN EQUATION						
constant	0.131***	-0.048	-0.048	0.180***	-0.036*	0.053***
	(0.026)	(0.033)	(0.077)	(0.038)	(0.021)	(0.001)
i_{t-1}	1.757***	1.253***	0.834***	1.328***	1.499***	1.618***
	(0.051)	(0.003)	(0.037)	(0.005)	(0.001)	(0.001)
i_{t-2}	-0.787***	-0.250***	0.124***	-0.350***	-0.507***	-0.625***
	(0.048)	(0.004)	(0.043)	(0.005)	0.002	(0.001)
π_t	-0.009	0.005	0.074***	0.001	0.015***	-0.007***
	(0.009)	(0.007)	(0.010)	(0.008)	(0.004)	(0.000)
VARIANCE EQUATION						
constant	-6.256***	-0.288	-0.045	-0.057	-0.105	-3.497***
	(1.628)	(0.232)	(0.368)	(0.094)	(0.144)	(0.075)
$g(z_{t-1})$	0.915***	0.366***	0.335**	1.090***	0.533***	0.502***
	(0.083)	(0.139)	(0.136)	(0.128)	(0.136)	(0.109)
h_{t-1}	-0.521***	0.825***	0.955***	0.546***	0.630***	-0.566***
	(0.029)	(0.091)	(0.020)	(0.091)	(0.047)	(0.087)
$CRED\_LLR1\_MA(6)$	0.227	-0.727***	-0.333	-1.449***	-1.660***	-4.259***
	(1.698)	(0.256)	(0.326)	(0.147)	(0.319)	(0.381)
Degrees of freedom (a)	-	-	-	-	-	-
GARCH LB test (b)	0.426	0.400	0.110	0.698	0.322	0.435
GARCH McLL test (c)	0.999	0.190	0.705	0.954	0.108	0.004
Number of observations	128	139	178	96	162	151

Notes: Std. errors are in parentheses. *, **, and *** denote significance at the 10%, 5% and 1% level, respectively.
(a) Estimation of the number of degrees of freedom v (in case of Student-t distribution).
(b) P-Value of the Ljung-Box no serial correlation test on the standardized residuals $\varepsilon_t/\sqrt{(h_t)}$.
(c) P-Value of the McLeod-Li no serial correlation test on the squared standardized residuals ε_t^2/h_t.

Table 7: EGARCH-X estimates with the 6-month moving average of $CRED_{LLR1}$ (2/2)

Conclusion and policy implications

- This paper proposes a new index of central bank credibility more close to the current monetary policy and inflation target levels in emerging inflation-targeting countries

- We also find that a higher credibility implies a lower interest rate volatility: **expectations channel**

- Credibility is expected to **improve monetary policy efficiency** since people will believe that the announced target will be realized and they will set their demands for wage and price increases accordingly

- Central bank credibility is a **self-reinforcing process** that emerging economies should seek to strengthen

Thank you for your attention